DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-016701 Address: 333 Burma Road **Date Inspected:** 08-Sep-2010

City: Oakland, CA 94607

OSM Arrival Time: 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1500 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: SAS OBG**

Summary of Items Observed:

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified as hole restoration and 6E/7E-A the following observations were made:

1E-pp9.5-E3-3

The QA Inspector randomly observed the ABF welder identified as Jin Pei Wang performing grinding tasks on the above identified back gouged weld joint. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector John Pagliero perform visual testing several times in an attempt to clear or accept the back gouged weld joint. The QA Inspector randomly observed the back gouged weld joint an noted visible slag inclusions were present and additional grinding would be required. After the grinding was completed the QA Inspector randomly observed the ABF welder begin performing the SMAW back weld for the above identified weld joint. The QA Inspector noted the base metal and the weld joint were preheated to approximately 150°F and back welding was commenced. The QA Inspector randomly observed the ABF welder to be utilizing 1/8" E7208 low hydrogen electrodes with 130 Amps. The QA Inspector noted the SMAW back weld was continued from the previous day shift and completed on the QA Inspectors shift on this date. The QA Inspector randomly observed the ABF welder begin performing grinding tasks in an attempt to remove and grind the weld reinforcement flush with the base material.

1E-pp8.5-E3-2

The QA Inspector randomly observed and ABF representative performing grinding tasks with a grinding disc in an attempt to back gouge the above identified weld joint. The QA inspector randomly observed the ABF

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representative locate several weld inclusions and perform additional grinding tasks to remove them prior to the back gouged weld joint being tested with magnetic particle testing by the SE QC Inspector. The QA Inspector noted no testing was performed on the back gouged weld joint on the QA Inspectors shift.

6E/7E-A1-A5

Upon the arrival of the QA Inspector in the am it was observed the above identified weld joint was fit up with the approved temporary attachments or fit up gear in place. The QA Inspector randomly observed the ABF welders identified as Song Tao Huang and James Zhen continued performing the FCAW full length tack weld. The QA Inspector was informed by the American Bridge/Fluor (ABF) welding Superintendent Dan Ieraci no runoff tabs would be utilized on this transverse weld splice (see summary of conversation). The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Tony Sherwood was on site monitoring the in process FCAW tack welding. The QA Inspector randomly observed and noted the FCAW parameters for both of the above identified ABF welders and they were; 280 Amps, 24.2 Volts and a travel speed of 350mm/min. The QA Inspector randomly observed the full length tack weld was completed at 1000. The QA Inspector randomly observed the ABF welders begin welding the ends of the weld joint. The QA Inspector noted the contractor will not utilize weld tabs rather back step or cascade the submerged arc welding.

Summary of Conversations:

no pertinant conversation noted.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Bettencourt,Rick	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer